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# **Chapter XI**

# Using SAP for ERP Applications and Design: A Case Study of the Sales and Distribution Process

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### **ABSTRACT**

In order to become globally competitive in today's dynamic business environment, organizations have to come closer to customers and deliver value added services and products in the shortest possible time. The primary business process through which this is achieved is the sales and distribution process. However, the sales and distribution process is just one part of an enterprise resource planning (ERP) system. This chapter will focus on the sales and distribution (SD) process of SAP's ERP system. This chapter will assist in learning about the basic functions that make up this process and how it affects the other modules in the ERP system. This chapter will also look at the Purchasing process and the materials requirements planning (MRP) process and how all the three processes are linked together to form one complete business process.

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# **INTRODUCTION**

The aim of an enterprise resource planning system is to integrate different business applications from various business processes. Though there are many different ERP softwares available in the market, SAP is the market leader in ERP systems, especially in Europe, where it's 39% market share compares very favorably with the 11% held by the merged Oracle/ Peoplesoft (Lynch, 2005, February 21). SAP is an acronym for "Systeme, Anwendungen, Produkte in der Datenverarbeitung" ("Acronym finder") which in English means systems, applications & products in data processing. The SAP R/3 system is divided into many modules with each module consisting of many business processes. In this chapter, we will look at the sales and distribution (SD) module in SAP's R/3 system. The main purpose of this chapter is to understand the sales and distribution process in an ERP system. It is important for the users of this chapter to understand the underlying business processes that take place when a company gets a sales order. Though it is easy to grasp what actually happens when a sales order is executed, it is more difficult to understand how the system gets the data, how the data is stored, how the flow of the order occurs and how the data in a simple sales and distribution process is used by the other modules in an ERP system and these are the things that this chapter tries to focus on. The objective of this chapter is to focus on the business processes in the sales and distribution module in the SAP system. People reading this chapter will be able to understand how the sales and distribution module works. Any activity that takes place in one module is reflected in the other modules in some way. Similarly, some of the activities that take place in the SD module are reflected in some other way in other modules. This chapter will also focus on how the sales and distribution module affects the production planning module and the financial accounting module.

This chapter can be used by the users as a starting point to understand the sales and distribution process. Usually, ERP implementations are so vast and complicated that it is very difficult to focus on one particular module. By understanding the business processes in one module, users will be able to better understand how the actual implementation occurs. They will know the different data that has to be implemented in the SD module. The intended audiences for this chapter are the faculty and students in schools interested in learning about the sales and distribution process of an ERP system. People involved in the implementation process of this module in a company can use this chapter as a starting point for understanding the business process in the sales and distribution process before actually proceeding with the implementation. Most importantly, this chapter can be used by beginners just starting to work on the system as a reference in understanding the business flow of the sales process. By learning about the SD module, users will also know the basics of how this module affects the other modules like the financial accounting module and the production planning module.

From an academic point of view, a long standing practice of universities has been to offer discipline specific courses. However, in order to survive in today's business world, students have to take a multi-disciplinary approach to study their courses. What that means is that even though a student may major in finance, they need to know how information systems affect the different financial areas of a business or if a student is marketing major, he or she still needs to know how marketing is affected by the production or operational areas of a business. It has become imperative for a student to understand the relationships between the different functional areas of a business and to have a working knowledge of how a business works. To try and achieve this, universities have started offering courses

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